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SECRETARY FOR  
ENVIRONMENTAL PROTECTION

## State Water Resources Control Board

AUG 09 2012

Geniece Higgins, Supervisor  
Orange County Health Care Agency  
Hazardous Materials Management Section  
1241 E. Dyer Road, Suite 120  
Santa Ana, CA 92705

### **PRELIMINARY 5-YEAR REVIEW SUMMARY REPORT FOR CLAIM NUMBER 5537; SITE ADDRESS: 5972 WARNER AVE, HUNTINGTON BEACH**

The UST Cleanup Fund (Fund) has completed our review of Orange County Hazardous Materials Management (Orange County) Case No. 88UT023. The Preliminary 5-Year Review Summary Report for this case is enclosed for your information and comment.

Please note that the Fund's recommendations are based on review of information contained in the Fund's case files, data currently in the GeoTracker database, and any other sources of information that were readily available to Fund staff at the time the review was conducted. Consequently, they may not reflect historical information that has not been uploaded to the GeoTracker database or available in the Fund's case files, and any data that has been recently submitted to your office.

The Fund requests that Orange County staff notify the Fund within 45 days from the date of this letter, as to whether you agree or disagree with our recommendations for this case. If you agree with our recommendations, we request that you provide the Fund with an estimated timeframe to either implement the recommendations for additional corrective action, or for closing this case. If you do not agree with our recommendations, we request that you provide the Fund with a summary of the reasons for disagreeing, and/or impediments to implementing the recommendations for additional corrective action or closing this case.

Responses to the Fund may be provided by email, letter, or a copy of correspondence to the RP, if the correspondence addresses all the information requested by the Fund.

CHARLES R. HOPPIN, CHAIRMAN | THOMAS HOWARD, EXECUTIVE DIRECTOR

1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95812-0100 | [www.waterboards.ca.gov](http://www.waterboards.ca.gov)

Exxonmobil Oil Corp.

-2-

Please direct your response to:

James Young  
Underground Storage Tank Cleanup Fund  
State Water Resources Control Board  
P.O. Box 944212  
Sacramento, CA 94244-2120

(Email: [jyoung@waterboards.ca.gov](mailto:jyoung@waterboards.ca.gov))

Fund staff will be sending copies of the completed Preliminary 5-Year Review Summary Report to applicable claimants 45 days from the date of this letter, unless Orange County notifies the Fund that they wish to discuss this case prior to transmittal to the claimant.

If you or your staff has any questions or concerns on specific reports that you would like to discuss with the Fund prior to transmittal of the report to the claimant, please contact James Young at (916) 341-7373, or by email within this period.

Sincerely,



Robert Trommer  
Senior Engineering Geologist  
Chief, Technical Review Unit  
Underground Storage Tank Cleanup Fund

Enclosure

## State Water Resources Control Board

### PRELIMINARY USTCF 5-YEAR REVIEW SUMMARY

August 6, 2012

#### Agency Information

Agency: Orange County Local Oversight Agency (LOP)	Address: 1241 East Dyer Road, Suite 120, Santa Ana, CA
Agency Caseworker: Geniece Higgins	Case No.: 88UT023

#### Case Information

USTCF Claim No.: 5537	Global ID: T0605900617
Site Name: Mobil #18-G31	Site Address: 5972 Warner Ave., Huntington Beach, CA
Responsible Party: Exxonmobil Oil Corporation, Attn: Omar El Kordy	Address: PNC Bank, Lock Box 676443, Dallas, TX 75267
USTCF Expenditures to Date: \$1,359,971	Number of Years Case Open: 24


#### Summary

A leak was identified in 1988 during the UST replacement, and the LOP opened an UST case No. 88UT023 at this site. Groundwater extraction and dual-phase extraction systems operated at the site from 1992 to 2011. A total of 12,716 pounds of hydrocarbons in vapor form, and 3,228,410 gallons of impacted groundwater were removed from the site. To date, \$1,359,971 in corrective action costs have been reimbursed by the Fund. Attachment 1 provides the technical data to support our recommendation.

#### Recommendation

Based on the available information, any residual petroleum hydrocarbons at the site do not pose significant risk to human health, safety, or the environment. This site meets the low threat closure criteria, and the Fund Manager recommends that the case be closed.

  
James Young, RCE  
Technical Review Unit  
(916) 341-7373  
8/7/12  
Date

  
Robert Trommer, C.H.G.  
Chief, Technical Review Unit  
(916) 341-5684  
8/7/12  
Date

## ATTACHMENT 1

### SUMMARY OF BASIC SITE INFORMATION (Conceptual Site Model)

#### Site Location/ History

- The site is an active gasoline service station, located on the southwest corner of Warner Avenue and Springdale Street, in Huntington Beach, California. The surrounding area is commercial in nature.
- An unauthorized release was reported in February 1988 after the UST replacement activities. The site is currently operated as an active Mobil service station.
- At least 15 monitoring wells and many water extraction wells have been installed at the site. Currently eighteen wells are monitored.
- Site map showing the locations of the monitoring wells, and groundwater TBA level contours, is provided at the end of this summary. (TRC, 2012) The original TRC figure was formatted to fit the size of the page.

#### Pollutant Source

- Nature of Contaminants of Concern: Petroleum hydrocarbons only
- Source, Date reported, and Status of Release: UST system, February 1988, USTs replaced
- Free Phase Hydrocarbons: Mainly present from October 1991 to February 1996, last observed in July 1998 in well MW-6.

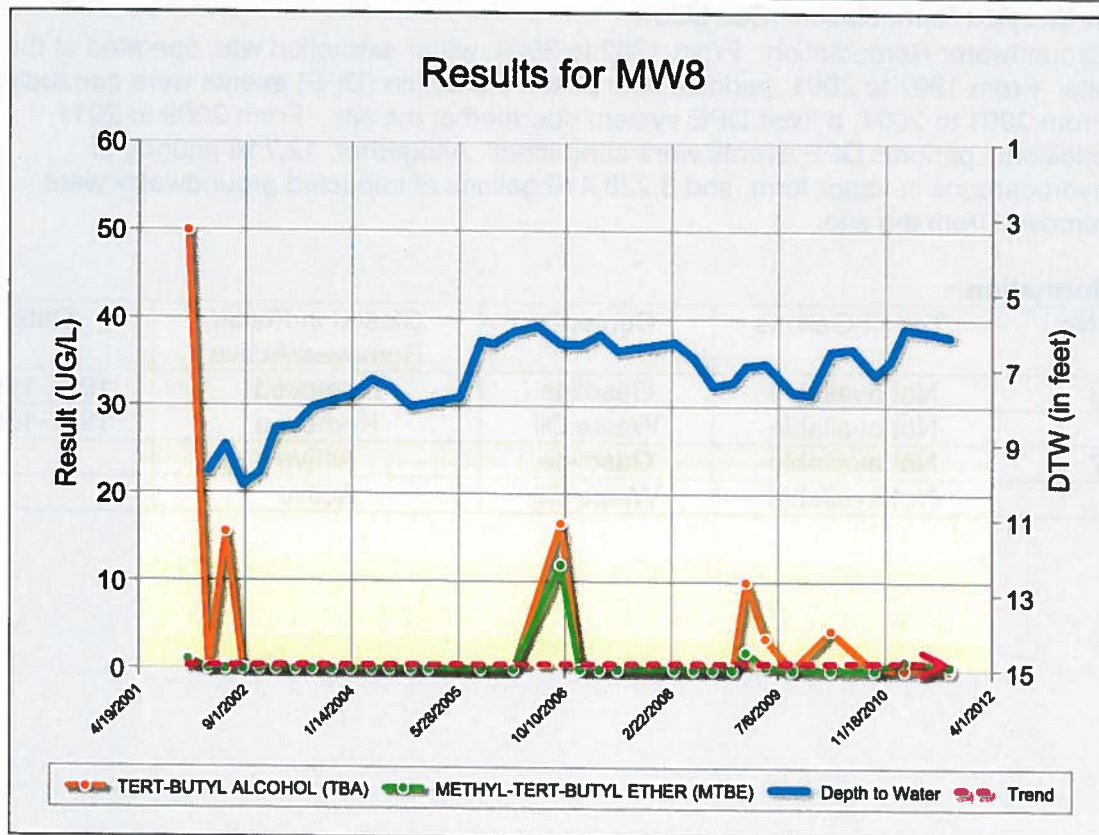
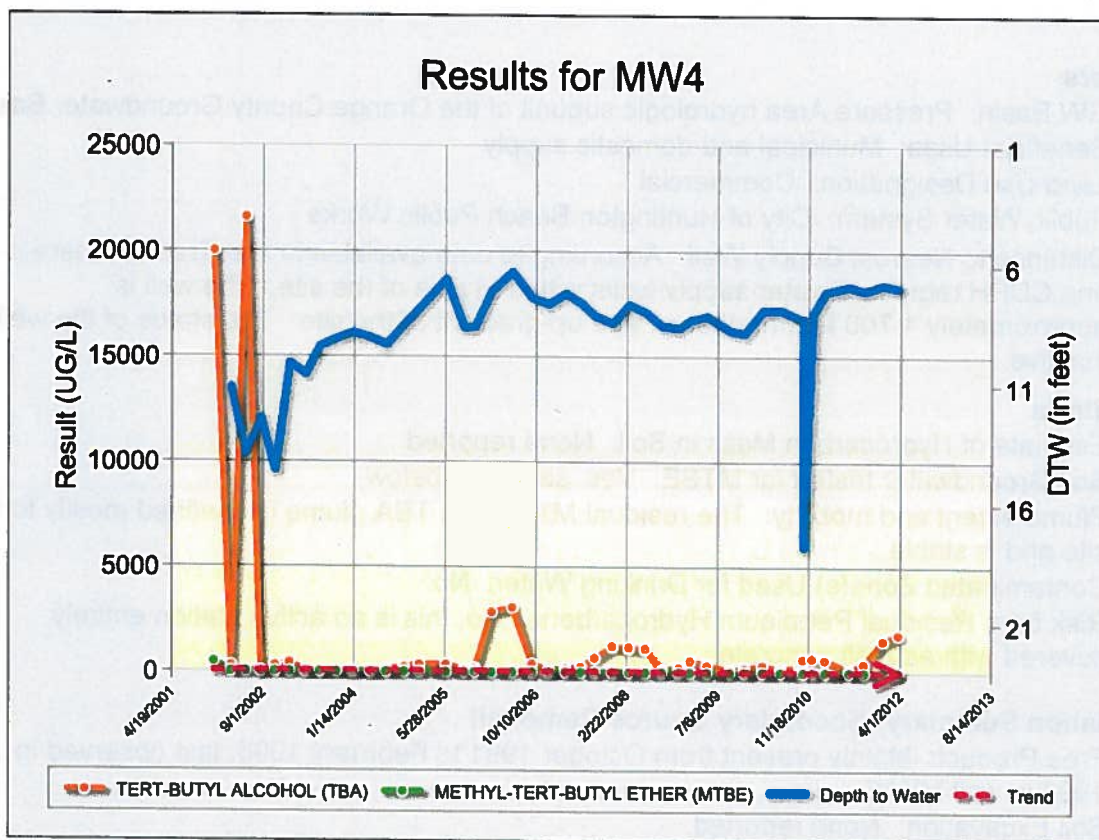
#### Geology/ Hydrogeology

- Stratigraphy: The site is comprised of inter-bedded layers of fine- to medium-grained sands, silty sands, sandy silt and clay to 20 feet below ground surface (bgs).
- Maximum Sample Depth: 35 feet bgs
- Current Minimum Groundwater Depth: 5.55 feet bgs at monitoring well MW-9.
- Current Maximum Groundwater Depth: 7.62 feet bgs at monitoring well MW-2.
- Current Average Depth to Groundwater: 6.48 feet bgs
- Appropriate Screen Interval: Yes
- Saturated Zones(s) Studied: 5 to 35 feet bgs
- Groundwater Flow Direction: Predominately to the south

#### Groundwater Trends:

The graphs below show groundwater MTBE and TBA trends in the source zone well MW-4 and down-gradient well MW-8.





### Receptors

- GW Basin: Pressure Area hydrologic subunit of the Orange County Groundwater Basin
- Beneficial Uses: Municipal and domestic supply
- Land Use Designation: Commercial
- Public Water System: City of Huntington Beach Public Works
- Distance to Nearest Supply Well: According to data available in GeoTracker, there is one CDPH regulated water supply wells within ½ mile of the site. The well is approximately 1,700 feet northeast, and up-gradient of the site. The status of the well is inactive.

### Risk Criteria

- Estimate of Hydrocarbon Mass in Soil: None reported
- Soil/Groundwater tested for MTBE: Yes, see table below
- Plume extent and mobility: The residual MTBE and TBA plume is confined mostly to the site and is stable.
- Contaminated Zone(s) Used for Drinking Water: No
- Risk from Residual Petroleum Hydrocarbons: No, this is an active station entirely covered with asphalt concrete.

### Remediation Summary (Secondary Source Removal)

- Free Product: Mainly present from October 1991 to February 1996, last observed in July 1998 in well MW-6.
- Soil Excavation: None reported.
- In-Situ Soil Remediation: See below.
- Groundwater Remediation: From 1992 to 2004, water extraction was operated at the site. From 1997 to 2001, periodic dual phase extraction (DPE) events were conducted. From 2001 to 2004, a fixed DPE system operated at the site. From 2009 to 2011, additional periodic DPE events were conducted. Altogether, 12,716 pounds of hydrocarbons in vapor form, and 3,228,410 gallons of impacted groundwater were removed from the site.

### Tank Information

Tank No.	Size in Gallons	Contents	Closed in Place/ Removed/Active	Date
1-3	Not available	Gasoline	Removed	1987-1988
4	Not available	Waste Oil	Removed	1987-1988
5-7	Not available	Gasoline	Active	
8	Not available	Waste Oil	Active	

### Monitoring Well Information

Well Designation	Date Installed	Screen Interval (feet bgs)	Depth to Water (feet bgs) (3/20/2012)
MW-1	1988-1992	10-29	7.12
MW-2	1988-1992	10-29	7.62
MW-3	1988-1992	10-29	6.66
MW-4	1988-1992	10-29	6.90
MW-7	1988-1992	3-33	5.62
MW-8	1988-1992	2-32	No access
MW-9	1988-1992	2-32	5.55
MW-10	1988-1992	5-35	6.83
MW-11S	May 2004	5-15	No access
MW-11D	May 2004	20-23	No access
MW-12	May 2004	5-15	6.08
MW-13S	May 2004	5-15	6.55
MW-13D	May 2004	19.5-22.5	6.57
MW-14	September 2010	5-15	No access
MW-15	September 2010	5-15	7.17
RW-12	1998-2001	5-15	6.53
RW-13	1998-2001	5-15	6.24
RW-14	1998-2001	5-15	6.68
RW-15	1998-2001	5-15	6.35
RW-16	1998-2001	5-15	5.60
RW-17	1998-2001	5-15	5.96
TCW-11	1998-2001	3-12.5	6.60

### Petroleum Hydrocarbon Constituent Concentration

Contaminant	Soil (mg/kg)		Water (µg/L)		WQOs (µg/L) MCL/Low Risk
	Maximum	Latest (2006)	Maximum	Latest (3/20/11)	
TPHg	33,000	382	120,000	72	NL
Benzene	310	0.279	44,600	0.16	1/250
Toluene	1,700	1.25	NA	0.11	150/300
Ethylbenzene	470	8.32	NA	<0.5	300/680
Xylenes	2,900	34.0	NA	0.38	1,750/1,750
MTBE	13	0.172	210,000	13	13 primary/5 secondary
TBA	12	4.76	99,000	1,800	12/1,200 <sup>a</sup>

NA: Not Analyzed, Not Applicable or Data Not Available NL: Not listed mg/kg: milligrams per kilogram, parts per million  
µg/L: micrograms per liter, parts per billion WQOs: Water Quality Objectives <sup>a</sup> California Department of Public Health Notification  
Level/ Response Level

# ATTACHMENT 2

## Past 5-Year Review Recommendations

This is the first 5-Year Review for the site.

Parameter	Unit	Maximum		Minimum		Notes
		Current	Target	Current	Target	
THP	mg/L	12,000	100	12,000	100	
Benzene	mg/L	5,000	5.0	5,000	5.0	
Toluene	mg/L	1,000	1.0	1,000	1.0	
Ethylbenzene	mg/L	450	0.45	450	0.45	
Xylenes	mg/L	3,000	3.0	3,000	3.0	
MTBE	mg/L	12	0.12	12	0.12	
TBA	mg/L	12	0.12	12	0.12	



